LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



OFFICE OF FISHERIES INLAND FISHERIES SECTION

PART VI -A

WATERBODY MANAGEMENT PLAN SERIES

BAYOU D'ARBONNE LAKE

LAKE HISTORY & MANAGEMENT ISSUES

Chronology

JULY 2006 – Prepared by Mike Wood, Biologist Manager, District 2

FEBRUARY 2013 – Updated by Ryan Daniel, Biologist Manager, District 2

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LAKE HISTORY

GENERAL INFORMATION

Date Lake formed

Impoundment of Bayou D'Arbonne, Corney Bayou, and Middle Fork Bayou in November, 1963.

Impoundment

Pool stage achieved January, 1964. Ownership of Lake Bottom retained by private individuals. Servitudes, rights of way, and flowage rights acquired by Bayou D'Arbonne Lake Watershed District

Size (surface area)

15,000 acres

Watershed

1,607 square miles (67:1 ratio of watershed to lake area). Primarily pine silviculture with bottom land hardwood. Acidic, sandy, infertile soil. Alkalinity and pH low.

Pool Stage

80 feet, MSL

Parish

Union, Lincoln

Border Waters

Corney Bayou and Bayou D'Arbonne above and below the reservoir are designated as scenic streams (**Appendix I**).

Spillway width

Earthen dam and 799' concrete spillway.

Drawdown description

Four 5'x5' cast iron gates in the spillway structure provide for lake dewatering. A stop log rack is immediately upstream of the gates. Stop logs may be used to prevent complete dewatering of the reservoir in the event of gate failure. Placing the stop logs may not be possible due to heavy current or debris in the structure. Two 10 x 40 ft. tainter gates are currently being installed into the earthen dam on the south side of the spillway and are scheduled to be in operation early 2013. These gates used in conjunction with each other will have the capacity to lower the lake in excess of one foot per 24 hour period.

Who controls

Louisiana Department of Transportation and Development (LDOTD). For drawdowns, a request from the Bayou D'Arbonne Lake Watershed District (BDLWD) is forwarded to LDWF for approval. A request is then made to LDOTD to schedule the opening of the gates. For flood control or other emergency situations, a request may be made directly from BDLWD to LDOTD for the opening of the gates.

Drawdown Schedule

To alleviate confusion regarding the scheduling of D'Arbonne Lake drawdowns and to enable

homeowners to make necessary plans for maintenance and repairs, the Bayou D'Arbonne Lake Watershed District has adopted a policy of a fall drawdown scheduled every four years beginning in 2004. Spillway gates are to be opened the day after Labor Day and closed on November 15th –January 15thdepending on the need for submerged vegetation control, especially the control of hydrilla, *Hydrilla verticillata*. When the four year rotation is interrupted due to a drawdown necessary for maintenance of the impoundment, the schedule will be reset and the next drawdown would be scheduled four years after the event.

LAKE AUTHORITY

Association

Bayou D'Arbonne Lake Watershed District shall consist of seven commissioners, each of whom shall be a qualified elector of the State of Louisiana who resides within the limits of Lincoln or Union Parishes. The commissioners shall be appointed by the Governor for a term of 4 years and until their successors have been appointed and have been qualified. Any vacancy shall be filled by the remaining commissioners for the unexpired term. Beginning in 1984, every appointee confirmed by senate and submitted by Governor again for conference every 2 yrs. after initial confirmation.

<u>Members</u>

Cagle, Stephen W	9365 Highway 2 Farmerville, LA 71241	scaglefish@yahoo.com	1/13/2015
Hogan, Larry "Don"	9365 Hwy. 2 Farmerville, LA 71241		1/13/2015
James, Noel B., II	2601Cypress Springs Ave Ruston, LA 71270	noel@jamestechnology.com	12/14/2014
Marvin "Joe" Rainer	179 Stowe Creek Rd. Ruston, LA 71270		1/13/2015
VACANT			
VACANT			
Towns, Terri L.	446 Dogwood Ln. Farmerville, LA 71241		3/15/2014

Contact information Post Office Box 1613 Ruston, LA 71273-1613 (318) 255-6825

Authorization

Created by R.S. 38:2555 as a political subdivision and budgetary unit.

ACT No. 9 By: Messrs. Field, Napper and Gibbs.

To create and establish the Bayou D'Arbonne Lake Watershed District, to be located in the parishes of Lincoln and Union...

Section 2. The Bayou D'Arbonne Lake Watershed District shall be a political subdivision of the State of Louisiana and a budgetary unit of the State of Louisiana, which shall have as its purpose the conservation of soil and water, developing the natural resources and wealth of the district for sanitary, agricultural and recreational purposes, as the same may be conductive to the public health, safety, convenience or welfare or of public utility or benefit. The creation of the D'Arbonne Lake within the said district as hereinafter authorized shall be for the purpose of conserving the soil and water and developing the natural resources and wealth of the district for sanitary, agricultural or recreational purposes, as the same may be conductive to the public health or public utility or benefit.

MAPS

Maps of Lake D'Arbonne are available from the Farmerville / Union Parish Chamber of Commerce and local area merchants (**APPENDIX II**).

Access

There are thirteen public boat launching facilities available for use at Lake D'Arbonne (Table 1). All are free of charge.

Table 1. List of public boat launches located on Lake D'Arbonne, LA.

		to boat fauticities focated off Lake D 7(100)nic, E7.		
RAMP NAME	COORL	DINATES	RAMP	PARKING
Spillway - N Side Below	32° 42' 45.19"	-92° 20' 19.03"	Concrete	Dirt - 10 Trailers
Spillway Ramp - South	32° 42' 40.20"	-92° 20' 52.60"	Concrete	Paved - 10 Trailers
Spillway - North	32° 42' 52.80"	-92° 20' 32.82"	Concrete	Paved - 12 Trailers
Meeks Landing	32° 42' 03.74"	-92° 14' 59.23"	Unimproved	Dirt - 10 Trailers
Hog Pen Landing	32° 49' 13.67"	-92° 30' 20.86"	Concrete	Dirt - 10 Trailers
D'Arbonne State Park	32° 46' 28.76"	-92° 28' 40.60"	Concrete	Paved - 33 Trailers
D'Arbonne Village	32° 47' 13.15"	-92° 27' 27.46"	Concrete	Paved - 10 Trailers
Hwy 2 Ramp	32° 47' 09.74"	-92° 27' 17.69"	Concrete	Paved - 10 Trailers
Jakes Landing	32° 45' 30.56"	-92° 24' 48.05"	Concrete	Paved - 35 Trailers
Old Hwy 33	32° 45' 23.00"	-92° 25' 02.91"	Concrete	Paved - 10 Trailers
Tech Landing	32° 45' 12.03"	-92° 26' 34.41"	Concrete	Dirt - 5 Trailers
Stowe Creek	32° 43' 04.24"	-92° 24' 48.70"	Concrete	Gravel - 15 Trailers
Terral Island	32° 45' 26.68"	-92° 22' 49.51"	Concrete	Dirt - 5 Trailers

Boat Docks

Public boat docks are located at all public boat ramps to enable boaters to temporarily moor boats while parking.

Piers

Fishing piers are located on the State Park grounds. Several have gravel beds constructed in close proximity to increase angler success.

State/Federal facilities

Lake D'Arbonne State Park 3628 Evergreen Road

Farmerville, LA 71241

318-368-2086 or 1-888-677-5200)

Website: www.lastateparks.com/lakedarb/darbonne.htm

Artificial Reefs

A series of artificial reefs have been placed in Lake D'Arbonne for use by recreational fishermen. Maps detailing exact locations on the lake are attached and are available at local area merchants. Coordinates for these reefs are listed below (Table 3).

Table 3. List of artificial reefs placed in Lake D'Arbonne by LDWF.

NAME	MATERIAL	COORD	INATES
State Park Reef	Polyethylene pallets	32° 46' 15.36"N	-92° 28'41.18"W
Horseshoe Reef	Polyethylene pallets	32° 47' 25.34"N	-92 ° 27'17.66"W
4 Mile Reef	Polyethylene pallets	32° 46' 37.64"N	-92° 25'34.22"W
Stowe Creek Reef	Polyethylene pallets	32° 43′ 54.09"N	-92° 24'12.08"W
Piney Point Reef	Polyethylene pallets	32° 44' 33.09"N	-92° 22'31.04"W
Reef 5	Polyethylene pallets	32° 43′ 52.09"N	-92° 21'32.04"W

SHORELINE DEVELOPMENT

Commercial

D'Arbonne Motel located on LA Hwy 33

Shoreline development by landowners

Residential with boat houses and piers

PHYSICAL DESCRIPTION OF LAKE

Shoreline length

150 miles

Timber type

Lake bottom consisted of oak-gum-cypress complex. The surrounding lands are primarily loblolly pine *Pinus taeda* silviculture. 5180 acres cleared prior to impoundment.

Average depth

8.5 feet

Maximum depth

30 feet

Natural seasonal water fluctuation

4-6 feet

10.8 feet above pool stage in April and May due to flood in 1991

EVENTS / PROBLEMS

Spillway gates closed, November, 1963. Pool stage achieved January, 1964.

Drawdowns

Annual 5 foot fall drawdowns initiated in 1964 – extended through 1969.

Drawdown target increased to 8' below pool stage in 1970. Eight foot drawdowns create extensive dewatering of the impoundment (>50%).

Drawdowns conducted in 1970 (8.8' below pool stage), 1972 (7.9'), 1975 (9.5'), 1978 (10.8'), 1980 (9.9'), 1984 (8.8'), and 1985 (12.7').

Decrease in adult size largemouth bass closely correlated with more drawdowns over 5 feet. Increased angler harvest during extensive drawdowns strongly suspected as cause.

1994 – Drawdown conducted – target reduced to 5 ft. below pool stage.

2001 - Drawdown conducted for spillway repair and to allow for shoreline property maintenance

2002 – Bayou D'Arbonne Lake Watershed District adopts policy of fall drawdowns every four years. The 5 foot drawdowns are set to begin in 2004. Spillway gates are to be opened the day after Labor Day and closed on November 15th. The action was to allow for homeowners to complete necessary repairs, ramp maintenance, channel maintenance, and stump clearing.

2004 – Scheduled drawdown, Labor Day – Nov. 15th, 5 ft. below pool stage

2008 – Scheduled drawdown, Labor Day – Jan. 15th for additional hydrilla control, 5 ft. below pool stage.

2009 – Spillway gate maintenance, Labor Day – approx. Oct. 1st, 1.5 ft. below pool stage.

2010 – For flood relief purposes, the option of installing a tainter gate into the earthen dam on the south end of current spillway is approved

2011 – Construction begins on tainter gates, completion expected 2013

2012 – Scheduled drawdown, Labor Day – Dec. 28th for additional hydrilla control, 5 ft. below pool stage

Flooding

The large watershed of D'Arbonne Lake insures that water levels above pool stage are common. Structures built below design storm elevation (90.00 feet, MSL) will flood with varying degrees of frequency (Table 4). Flood frequency is determined by elevation above the spillway crest. According to flood stage elevation from USGS, approximately 323 structures were flooded in the 1991 flood which reached 90.78 feet, MSL. It's important to note that the second highest recorded water level was 86.1 feet, MSL in 1958, before construction of the D'Arbonne spillway.

Since completion of the reservoir, numerous camps and homes have been constructed around the lake at elevations below 90.00 feet, MSL. The lowest, according to Denmon Engineering field surveys in 1996 and 1997, has a floor elevation of 82.06 feet, MSL, or only 2.06 feet above the spillway crest. A total of 275 structures are located at or below elevation 90.00 feet, MSL.

Table 4. Number of structures flooded for various flood frequencies on Lake D'Arbonne, LA.

FREQUENCY	D'ARBONNE POOL (feet, MSL)	NUMBER OF STRUCTURES FLOODED
2-year	82.20	1
5-year	84.32	5
10-year	86.64	26
25-year	86.94	80
50-year	88.73	205
100-year	89.76	262

^o Source: State Project No. 505-56-0031, Additional <u>Spillway Capacity Bayou D'Arbonne Lake</u>, Denmon Engineering, April 1998.

June 18, 1997 – Opinion on use of the D'Arbonne spillway for flood control from Paul Colquette, District Design, Water Resources and Development Engineer.

"A flood control reservoir provides flood control benefits only to the area downstream of the dam and spillway. Therefore, Lake D'Arbonne does not and cannot provide flood control benefits for the residents surrounding the lake."*** "Opening the gates during periods of high lake levels will theoretically increase the overall flow out of the lake. However, the flow increase is such a small percentage; the results are more physiological than actually measurable. Any time the gates are opened, the possibility exists for logs or other debris to become lodged in the gate opening. If this happens, the gate cannot be closed completely until the obstruction is removed. Forcing the gate closed will probably damage the gate or lift mechanism."

August 19, 1997 -Union Parish Courthouse - Denmon Engineering Status Report on D'Arbonne Lake Flood Control. Engineer Thomas Bennett reported on project to determine feasible means to pass flood waters through the dam so that no homes would flood.

Preliminary Results:

1st Option — Add more spillway.

Results were calculated for additions to the spillway in increments, but figures were given for the following: With an addition of 400' to the present D'Arbonne spillway (currently 800' in length), 147 existing homes would flood in a 100 year event. With an addition of 1,000' to the present D'Arbonne spillway (currently 800' in length), 61 existing homes would flood in a 100 year event.

Conclusion: Enlarging spillway alone will not achieve goal.

2nd Option — Reduction of spillway elevation

Lakeside development would likely occur at 80 foot MSL. Reduction in pool stage would leave many existing docks, boathouses dry or extremely shallow.

Addition of 1000' of spillway @ reduction of 1', 2', 3' MSL calculated.

Example given of 77' MSL (3' below existing pool stage) — 9 homes would still flood.

Conclusion: Goal cannot be met. Eliminated from consideration.

3rd Option — Tainter Gates

Watershed would require hinged gates of a tremendous size (100' in width).

Estimated cost would range well into the 10's of millions of dollars. Bottom gates would be 5' below spillway elevation. Example given of 6 - 100' tainter gates used — 18 homes would still flood.

Conclusion: Cost prohibitive.

4th Option — Non-structural Alternatives

Cost of buying "at risk" structures (not associated property) of the 221 surveyed homes was calculated at approx. 12 million dollars.

Conclusion: Cost prohibitive.

June 14, 1999 - Mr. Ed Preau, DOTD Engineer, affirmed that openings of the four 5'x5' gates offer no significant increase over water that already flows over the 799' spillway. In fact, the significance of the gates is progressively less as water flow increases over the spillway (as in times of high water). He explained that the spillway structure was designed only for infrequent lake dewatering, not flood protection. The gate openings also expose the structure to damage from logs and debris in the gate openings. The cast iron gates and/or the concrete structure can be damaged upon closure of the gates, resulting in partial to extensive dewatering of the lake. Subsequent repairs would be available only from funds, allocated by legislative action, a process not noted for being prompt.

2010 – The option of installing tainter gates into the earthen dam on the south side of the spillway was approved.

2011 – Construction began on flood control tainter gates on the south side of the spillway. The project is expected to be complete in 2013.

Water Supply

July, 20, 2006 – Local newspaper sources report that federal funds totaling \$500,000 have become available to start of study to determine the feasibility a water pipeline and treatment plant from Lake D'Arbonne to furnish water to the Farmerville and Ruston areas. There has been no further development on this issue as of 2012.

MANAGEMENT ISSUES

AQUATIC VEGETATION

During the warmer months, aquatic vegetation has historically been prevalent in the shallow waters of both the Little D'Arbonne Arm and the Little Corney Arm. During the 20 year period from 1965 to 1985, eight drawdowns were conducted for the purpose of aquatic weed control. Results were generally unsatisfactory for the purpose of weed control. In the 15 year period from 1970 to 1985, drawdowns were increased to more than 5 feet below pool stage. Drawdowns ranged from 7.9 feet below pool to 12.7 feet below pool stage in 1985. The more extensive drawdowns (>5') were closely correlated with reductions in adult size largemouth bass, crappie, and bluegill

Hydrilla, which was first discovered in D'Arbonne Lake in 2005, has steadily expanded and is currently (2012) found throughout the Bayou D'Arbonne and Corney arms of the lake. The drawdowns have been effective at temporarily reducing the coverage in depths up to five feet, though it quickly re-infests the shallows after the lake returns to pool stage and normally becomes problematic within two years following a drawdown. Managing hydrilla coverage by manipulating water levels with the new tainter gates may become necessary (See MP-B).

Type Maps

The most recent aquatic vegetation type map and survey was completed in August, 2011. This report is included as an attachment in D'Arbonne Lake MP-B (updated 2012).

Previous Type Maps

1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 2005^* , 2007^* , 2009^* , and 2011^*

*denotes type map surveys that are on file, using current standardized techniques, maps included.

Biomass

1977, 1978, 1979, 1983, 2002, 2003.

Biological

NA

Chemical

Applications of glyphosate (0.75 gal/acre) or liquid 2,4-D (0.75 gal./acre) have routinely been made from specially equipped boats to control emergent and floating species, including alligator weed (*Alternanthera philoxeroides*) water hyacinth (*Eichhornia crassipes*), water primrose (*Ludwigia spp.*) and American lotus (*Nelumbo lutea*). Granular 2,4-D (100 lbs./acre) has also been applied for lotus control. The majority of the herbicide applications have been made in areas where vegetation has impacted shoreline residences and has impeded navigation from private boat houses and along marked boat lanes. A small infestation of common salvinia (*Salvinia minima*) was discovered in 2007 and treated with diquat dibromide (1.0 gal/acre). It has not been observed since 2009. Annual treatments of common aquatic vegetation species is listed in Table 5.

Table 5. Treatment history by year of herbicide applications from 2005 – 2012 on D'Arbonne Lake, Louisiana.

YEAR	Most Common Species Treated	Total Acres Treated
2005	American lotus, hydrilla	14
2006	American lotus, alligator weed	32
2007	American lotus, alligator weed	28
2008	water hyacinth	5
2009	common salvinia, water hyacinth	16
2010	none treated	0
2011	American lotus, primrose, hydrilla	85
2012	American lotus, water hyacinth, hydrilla	59

Physical

Drawdowns on Lake D'Arbonne have been used frequently for aquatic weed control. The dates, purpose and water levels of drawdowns are found in Table 6.

HISTORY OF REGULATIONS

Recreational

Statewide regulations for all fish species, the 2013 recreational fishing regulations may be viewed at the link below:

http://www.wlf.louisiana.gov/sites/default/files/pdf/publication/31743-2013-fishing-regulations/ldwf_fishing_low-res.pdf

Black Bass (Largemouth, spotted): 10 daily of any size, no minimum length limit (MLL)

Buffalo Fish or their hybrids: 16 inch MLL, 25 per day under 16" Freshwater Drum (Gaspergou): 12 inch MLL, 25 per day under 12"

Bowfin (Choupique, Grinnel): 16 inch MLL

Channel Catfish: 11 inch MLL (see Catfish below for possession limit)

Blue Catfish: 12 inch MLL (see Catfish below for limit) Flathead Catfish: 14 inch MLL (see Catfish below for limit)

Catfish (Blue, Channel and Flathead): the possession limit for catfish caught on a recreational license shall be 100. The 100 fish may be a single species, or a combination of blue, channel or flathead catfish. In addition, an angler may possess a maximum of 25 undersize catfish or a single or combination of all 3 species.

Crappie: 25 daily (see below) Crawfish: 150 pounds daily

Paddlefish: No legal harvest or possession

Shad: 50 pounds daily

Striped Bass of Hybrid Striped Bass or any combination thereof: 5 daily of which no more than

two may exceed 30 inches in length White Bass: 50 daily, no MLL Yellow Bass: 50 daily, no MLL

Special Regulations

Title 76

WILDLIFE AND FISHERIES

Part VII. Fish and Other Aquatic Life

Chapter 1. Freshwater Sports and Commercial Fishing

§134.Lake D'Arbonne (Union Parish),

- Yo-Yo restrictions
 - o No more than 50 yo-yos, or trigger devices, shall be allowed per person.
 - o Each yo-yo or trigger device shall be clearly tagged with the name, address and telephone number of the owner or user.
 - o All fish or any other animals caught or hooked, shall be immediately removed from the device.
 - o Each yo-yo or trigger device must be re-baited at least once every 24 hours.
 - When not being used in accordance to the above regulations, each yo-yo or trigger device shall be removed immediately from lake waters.
 - o No yo-yo or trigger device shall be attached to any metallic object.

Trotline Restrictions

- All trotlines must be marked, tagged, and dated with the owner or user's name, address, phone number and the date of placement. The trotline must be marked on each end with a floating object that is readily visible.
- No person shall set more than three trotlines with a maximum of 50 hooks per trotline.
- o All trotlines must be removed from lake waters when not in use.
- All trotlines must have an 8-foot cotton leader on each end of the trotline to insure that if the trotline is left unattended, the cotton leader will deteriorate and the line will sink.
- o All trotlines must be attended daily while in service.

Proposed Largemouth Bass Regulations

March, 2001 – The period of 1999-2000 was one of improved angling success for D'Arbonne Lake. Moderation in the frequency and extent of lake drawdowns is credited with much of the positive influence. In addition, the product of Florida bass introductions were becoming evident with catches of trophy size bass, including one over 15 pounds in 2000. The successful management results generated interest in additional enhancement measures including largemouth bass harvest restrictions.

In related discussions with the Bayou D'Arbonne Lake Watershed District, angler support was defined as a critical element to the success of any harvest restriction. The idea of a largemouth bass slot limit was quickly abandoned due to the popularity of bass tournaments on D'Arbonne Lake. A review of sampling data indicated a minimum length limit would be ineffective unless the restriction was set at least 16 inches.

Adjustments to the D'Arbonne Lake largemouth bass creel limit were not considered. The purposes of a daily creel limit are to prevent over-harvest of the fishery, to allow equitable distribution harvest, and to give anglers a reasonable target to mark his fishing success. Harvest may reduce the number of quality-size bass available to anglers, but seldom to the detriment of a

population's ability to sustain through natural recruitment. The equitable distribution of harvest is implied through a daily creel limit. Distribution of harvest is more dependent on angling skill than on a daily creel limit. Further, obtaining a daily limit of 10 bass is a relatively rare event and usually accomplished only by more skilled anglers. Available options are to either completely remove the daily creel limit for bass or to reduce it to a level that becomes biologically significant. The former option is rejected for the obvious reason that it implies an unlimited supply of bass that can be harvested without harm to the fishery. For the second option to be meaningful, the required reduction in creel would be unacceptable to anglers.

With support from the Bayou D'Arbonne Lake Watershed District, the following Notice to the Anglers of D'Arbonne Lake was published in the Farmerville Gazette, the Ruston Daily Leader, and the Monroe News Star.

Notice to Anglers of D'Arbonne Lake:

Public comment is now being requested concerning a change in D'Arbonne Lake largemouth bass regulations. D'Arbonne Lake is currently listed under statewide regulations for largemouth bass that include no length limit and a 10 fish daily creel limit. Regulations being considered include a 16" minimum length limit, with a 10 fish daily creel limit.

The issue originated from expressed angler desire to enhance the existing population with harvest restrictions designed to produce larger bass. LDWF analysis indicates that a 16" minimum size limit would be required to effect beneficial change to the current bass population. By protecting largemouth bass smaller than 16" in length, the regulation would decrease angler harvest rate, but would increase angler catch rate.

Until recently, LDWF biologists have recommended against additional harvest restrictions for D'Arbonne Lake, advising that any changes be contingent on the successful incorporation of Florida bass, and angler approval. Florida bass stockings have now been confirmed as successful. Local angler opinion will now determine if the process to implement the proposal is initiated under the Louisiana Administrative Procedures. Your written comments are requested and encouraged. Please mail a short message with your opinion to:

LA Department of Wildlife and Fisheries

Attn: Mike Wood 368 CenturyTel Park Drive

Comments were received for a 30 day period. Final count was 8 in favor of the proposal and 18 against. As a result, the process to initiate length regulations for largemouth bass was not recommended.

Crappie Regulations

In April 2008, at a regularly scheduled meeting of the Bayou D'Arbonne Watershed Committee, LDWF presented information regarding special regulations for crappie. The presentation was in response to a group of anglers who had requested the BDWC pursue special crappie regulations in an effort to improve the overall quality of the crappie population. Utilizing age and growth data from D'Arbonne Lake crappie, LDWF advised against any changes to the current reg.'s, citing that there would only be a slight increase in survival of age 2 fish under a 10 inch minimum length limit and that there would be no benefit to the population with a reduced creel limit of 25 crappie per day. Throughout 2009, LDWF conducted an on-the-water opinion survey of D'Arbonne Lake anglers to gain information on angler perception of crappie management. Overall, 67% of 223 anglers claimed to be satisfied with the current regulations, while the

remainder desired a minimum length, reduced creel limit, or both. This issue resurfaced again in the fall of 2011, with anglers requesting to the LDWF Commission for a reduced creel of 25 crappies/day. A Notice of Intent was issued by the LDWF Commission in April, 2012 with a 100 day public comment period initiated. The new regulation went into effect November, 2012 (see **Appendix III**).

Commercial

The 2013 commercial fishing regulations may be viewed at the link below:

http://www.wlf.louisiana.gov/sites/default/files/pdf/publication/31745-commercial-fishing-regulations/2013 commercial fishing low-res.pdf

Gill and trammel nets were removed from the main part of the lake in the 1970s to protect the striped bass. Later webbing was again allowed to be fished in the lake. On June 20, 1984, trammel nets, gill nets, flag webbing, and fish seines were removed from the lake. Hoop nets, slat traps, trotlines, limb lines and stump hooks are allowed. No nets allowed during drawdowns (includes hoop nets).

Title 76 - WILDLIFE AND FISHERIES

Part VII. Fish and Other Aquatic Life

Chapter 1. Freshwater Sports and Commercial Fishing

§111. D'Arbonne Lake

A. Whereas, the Bayou D'Arbonne Lake Watershed District Commission, the local regulatory body for D'Arbonne Lake passed a resolution at its meeting on February 7, 1984 prohibiting trammel nets, gill nets, flag nets, and fish seines in D'Arbonne Lake effective June 1, 1984, and subsequently have requested the Wildlife and Fisheries Commission to ratify said resolution; and B. whereas, studies conducted by the Department of Wildlife and Fisheries on D'Arbonne Lake have demonstrated the detrimental effects the use of certain types of commercial fish nets have on game fish populations; and C. whereas, D'Arbonne Lake does not support high poundage of commercial species nor a true commercial fisheries; and D. whereas, the most sought after commercial species, catfish (flathead), can still be harvested adequately using hoop nets, slat traps, trot lines, limb lines, and stump lines.

E. Therefore be it resolved, the Louisiana Wildlife and Fisheries Commission hereby prohibits the use of gill nets, trammel nets, flag nets and fish seines in D'Arbonne Lake (Union and Lincoln Parishes) and includes all areas between the spillway structure and Gill's Ferry Landing on D'Arbonne Creek and Hogpen Landing on Corney Creek.

AUTHORITY NOTE: Promulgated in accordance with R.S. 56:22.

HISTORICAL NOTE: Promulgated by the Department of

Wildlife and Fisheries, Wildlife and Fisheries Commission, LR

10:470 (June 1984).

DRAWDOWN HISTORY

Table 6. History of drawdowns on Lake D'Arbonne, LA from 1964 to 2008.

Table 0. II	Table 6. History of drawdowns on Lake D'Arbonne, LA from 1964 to 2008.			
DATE	PURPOSE	LOWEST LEVEL	GATES OPENED	BACK TO POOL STAGE
	Boat Ramp			
1964	Construction	5.0'	09/04/64	01/24/65
1965	Weed Control	5.2'	09/11/65	02/09/66
1966	Weed Control	4.9'	09/13/66	02/22/67
1000	Was d Cantus 1	5 21	00/10/69	
1968 1969	Weed Control Weed Control	5.3' 5.1'	09/10/68 07/31/69	12/13/68 01/09/70
1969	Weed Control	8.8'	09/09/70	03/12/71
1970	Weed Control	7.9'	09/09/70	12/16/72
1971	weed Collifor	7.9	09/03/12	12/10/72
1972	Weed Control	7.9'	09/05/72	12/16/72
1973	Drawo	down attempted, l	out unsuccessful	
1974	Drawo	down attempted, b	out unsuccessful	
1975	Spillway Repair	9.5'	08/18/75	02/08/76
1978	Construction, Channel marking	10.8'	07/17/78	01/10/79
1980	Spillway Gate Repair	9.9'	09/11/80	04/03/81
1984	Weed Control	8.4'	09/10/84	10/26/84
1985	Weed Control, Spillway repair	12.7'	09/05/85	02/10/86
1994	Dock and seawall repair	5.5'	09/20/94	
2001	Dock and seawall repair	5.0°	10-15-01	01-15-02
2004	Boat lane project & Dock and seawall repair	5.0'	09-07-04	12-15-04
2008	Dock and seawall repair, hydrilla control	5.0'	9-02-08	01-15-09
2012	Dock and seawall repair, hydrilla control	5.0'	9-04-12	12-28-12

Success

D'Arbonne Lake drawdowns have been conducted for a variety of purposes. The most common is to control overabundant submerged vegetation in the upper reaches of the reservoir. Results have been marginal. The large watershed of D'Arbonne makes low water periods for any purpose uncertain. During several drawdown efforts, the lake water level has rapidly rebounded several feet due to heavy rains. The drawdown of 2008 was successful in temporarily removing much of the hydrilla from depths less than five feet. By mid-summer 2011, the hydrilla had completely re-infested the same shallow areas, with total coverage expanding.

Fishing closure

Recreational fishing has not been prohibited during any D'Arbonne drawdown. Commercial fishing is prohibited during drawdowns.

Estimated % exposed

The percent of lake bottoms exposed during drawdowns at various water levels is shown in Table 7.

Table 7. The percentages of lake bottoms exposed on Lake D'Arbonne, LA at various water levels.

LAKE LEVEL	WATER SURFACE AREA	PERCENTAGE LAKE BOTTOM EXPOSED
80 foot, MSL (pool stage)	15,000	0%
5 foot below pool stage	8,819	41%
10 foot below pool stage	6,949	54%
15 foot below pool stage	5,411	64%

Areas determined by planimeter of D'Arbonne Lake contour map from <u>Contour Maps of Major Lakes in Louisiana</u>, Janice S. Hughes, 1972.

Who operated structure

Louisiana Department of Transportation and Development is responsible for the maintenance and operation of 19 reservoir embankments, including D'Arbonne, to maintain their integrity and to prevent any breach or damage to the existing facilities as per Act 270 of 1984. DOTD is not responsible for lake management. Any request for opening a lake must be directed to DOTD in writing from the Director of the Department of Wildlife and Fisheries. Verbal request are not to be accepted. The letter from Wildlife and Fisheries is to indicate the date for gate opening and the rate of drawdown desired for wildlife or lake management purposes. An exception to this policy is during times of public safety, such as a flood event, when requests from the Bayou D'Arbonne Lake Watershed Commission may be made directly to DOTD.

Fish Kills

No fish kills reported during any D'Arbonne drawdowns.

FISH KILLS / DISEASE HISTORY

LMBV sampling conducted in 2000 (11% of 64 fish positive). Sampling also conducted in 2003 (20% of 60 fish sample – positive).

Fish kills have been regularly reported during spring and early summer on Lake D'Arbonne. These kills have consisted almost entirely of channel catfish and have been attributed to releases from catfish traps that had been placed in depths that became subject to hypoxia during the development of a thermocline.

A fish kill was reported in the upper reaches of the Bayou D'Arbonne arm in September 2007. The kill was significant with many species documented. The cause of the kill was attributed to release of water from upstream Lake Claiborne, with most of the fish believed to have been affected in an area immediately below the Lake Claiborne spillway.

CONTAMINANTS / POLLUTION

Water quality

No water quality impairments documented for D'Arbonne Lake. Water quality concerns noted for D'Arbonne watershed. Related US Environmental Protection Data is provided in <u>Appendix IV</u>. Additional information available from the following LADEQ links:

 $\frac{http://www.deq.louisiana.gov/portal/Portals/0/planning/305b/2004/04\%20IR1-FINAL-Appendix\%20A\%20WITH\%20FINAL\%20EPA\%20ADDITIONS\%20-\%20August\%2017\%202005.xls$

Water level

Historic and real-time water level data is available from the USGS site below:

http://waterdata.usgs.gov/la/nwis/uv/?site_no=07366364&PARAmeter_cd=00065,72020,63160,00060

BIOLOGICAL

Fish Sampling History

Rotenone (biomass) sampling was conducted from 1964 - 1995. Rotenone sampling was discontinued due to negative public sentiment and availability of data from alternative sampling techniques. Electrofishing is currently used as the primary largemouth bass sampling tool. Lead netting is utilized as the primary crappie sampling tool. Gill netting is used to sample large fish, including bass and commercial species.

In 2010, a three year mortality study was initiated for bass and crappie on Lake D'Arbonne. This is an intensive study which involves age and growth analysis of bass and crappie over a three year period and a recreational creel survey for one year. This data will be used to produce mortality estimates, age and growth, and yield per recruit models which will aid in determining the most appropriate management of these species.

Table 8 below describes LDWF sampling efforts since 1964 and scheduled sampling until 2014.

Table 8. Summary of fish sampling on Lake D'Arbonne, LA from 1964 – 2014.

Table 8. Summary of	fish sampling on Lake D'Arbonne, LA from 1964 – 2014.
	D'ARBONNE LAKE FISH SAMPLING
1964 – 1991	Rotenone 8 to 12–one acre sets (No rotenone samples in 1975, 1989, or 1990.
1989	Electrofishing (3)15 minute samples
1990	Electrofishing (5)15 minute samples (spring and fall) Shoreline seining 18 samples 100' experimental gill nets 2 samples
1991	Electrofishing (10)15 minute samples (spring and fall) Rotenone 4–one acre sets
1992	No sampling
1993	Electrofishing (10)15 minute samples (spring and fall) Gill Netting – 9 samples each including: 300' 2.5, 3.0, 3.5 in. bar.
1994	Electrofishing (7)15 minute samples (fall only) Frame Nets – 7 sets
1995	Electrofishing (8)15 minute samples (spring and fall) Rotenone 4–one acre sets
1996	Gill Netting – 9 samples each including: 9 samples each including: 300' 2.5, 3.0, 3.5, 4.0 in. bar. Frame Nets – 7 sets
1997	Electrofishing – (8)15 minute samples (spring and fall)
1998	No sampling
1999	Electrofishing •–(8) 15 minute samples (spring and fall) •Age & growth •Genetics Frame/Lead Nets - 9 stations Shoreline Seining
2000	Electrofishing •–(8) 15 minute samples (spring and fall) Gill Netting - 9 stations
2001	Electrofishing •–(9) 15 minute samples (spring and fall)

2002	Electrofishing •–(9)15 minute samples (spring and fall) •Age & growth •Genetics Frame/Lead Nets - 9 stations
2003	Electrofishing •–(9)15 minute samples (spring and fall) Frame/Lead Nets - 9 stations
2004	No sampling
2005	Aquatic Type Map Electrofishing •–(9)15 minute samples (spring and fall) •Age & growth •Genetics
2006	Lead Nets - 9 stations Gill Netting - 9 stations Shoreline Seining
2007	Aquatic Type Map Electrofishing •–(9)15 minute samples (spring and fall) •Age & growth •Genetics
2008	Shoreline Seining
2009	Aquatic Type Map Electrofishing -(9) 15 minute samples (spring and fall) Age & growth Genetics Lead Nets - 9 stations Gill Netting - 9 stations
2010	Electrofishing -(9) 15 minute samples (spring and fall) -Age & growth -Genetics Lead Nets - 9 stations Gill Netting - 9 stations Mortality Study – first year

2011	Aquatic Type Map Electrofishing -(9) 15 minute samples (spring and fall) Age & growth Genetics Lead Nets - 9 stations Mortality Study – second year
	Recreational Angler Creel Survey
2012	Aquatic Type Map Electrofishing •(9) 15 minute samples (spring and fall) •Age & growth •Genetics Lead Nets - 9 stations Mortality Study – third year Gill Netting – 9 stations
2013	No Sampling
2014	Aquatic Type Map Electrofishing •(9) 15 minute samples (spring and fall) •Largemouth Bass genetics •Creel Survey with emphasis on evaluating crappie regulations •Lead Nets – 9 stations, incl. crappie age and growth
2015	No Sampling
2016	Aquatic Type Map Electrofishing •(9) 15 minute samples (spring and fall) •Largemouth Bass Genetics

Lake records

No lake records compiled. Largest largemouth bass documented 15.31 pounds (2000) Second largest bass -13 pounds, 6 ounces (1990).

See LOWA State Records

http://www.laoutdoorwriters.com/Records/LouisianaFishRecords/tabid/87/Default.aspx

Stocking History

The existing fish population was not removed before impoundment of Lake D'Arbonne. The stocking history of Lake D'Arbonne is found in Table 9 below.

Table 9. The stocking history by year and species for Lake D'Arbonne, LA, 1964 - 2012.

Date	Number / Species Stocked						
1964	largemouth bass, black crappie, bluegill, channel catfish						
1965	6,100 striped bass, 91,454 walleye						
1967	16,870 striped bass						
1968	79,279 striped bass						
1969	70,500 striped bass						
1970	111,633 striped bass						
1971	81,613 striped bass						
1972	2,644 striped bass						
1973	7,232 striped bass						
1974	6,110 striped bass						
1975	207,165 striped bass						
1976	20,540 channel catfish						
1977	150,142 striped bass, 24,200 blue and channel catfish						
1978	191,950 striped bass						
1979	170,255 striped bass						
1980	37,130 striped bass						
1981	150,114 striped bass						
1982	151,876 hybrid striped bass						
1983	111,515 hybrid striped bass						
1984	149,166 hybrid striped bass						
1985	75,000 Florida largemouth bass, 152,334 hybrid striped bass						
1986	4,290 channel catfish, 1,564 blue catfish						
1987	75,000 Florida largemouth bass						
1992	4,000 Florida largemouth bass (bought from bass tournament proceeds)						
1995	138,143 Florida largemouth bass						
1999	140,728 Florida largemouth bass						
2000	3,300 Florida largemouth bass fry (from Lunker Program - 15.31# bass) 155,176 Florida bass fingerlings						
2001	163,239 Florida bass fingerlings						
2002	75,456 Florida bass fingerlings						
2003	135,841 Florida bass fingerlings						
2004	135,841 Florida bass fingerlings						
2005	149,481 Florida bass fingerlings						
2007	151,024 Florida bass fingerlings						
2008	87,714 Florida bass fingerlings						
2009	85,142 Florida bass fingerlings						
2010	17,141 Florida bass fingerlings						
2011	151,734 Florida bass fingerlings						
2012	150,990 Florida bass fingerlings						

Genetics

Largemouth bass genetic sampling has been conducted in the years: 2000, 2002, 2003, 2005, 2010*, 2011*, and 2012*.

*genetics sampling conducted as part of mortality study on largemouth bass.

Species profile

Table 10. Fishes of the bayou D'Arbonne Lake drainage.

LIST OF INDIGENOUS FRESHWATER FISHES OF THE D'ARBONNE DRAINAGE*

Lamprey Family, PETROMYZONTIDAE

Southern brook lamprey, *Ichthyomyzon gagei* Hubbs and Trautman Chestnut lamprey, *Ichthyomyzon castaneus* Girard

Paddlefish Family, POLYODONTIDAE

Paddlefish, *Polyodon spathula* (Walbaum)

Gar Family, LEPISOSTEIDAE

Spotted gar, *Lepisosteus oculatus* (Winchell) Longnose gar, *Lepisosteus osseus* (Linnaeus) Shortnose gar, *Lepisosteus platostomus* Rafinesque Alligator gar, *Lepisosteus spatula* (Lacépède)

Bowfin Family, AMIIDAE

Bowfin, Amia calva Linnaeus

Mooneye Family, HIODONTIDAE

Goldeye, *Hiodon alosoides* (Rafinesque) Mooneye, *Hiodon tergisus* Lesueur

Freshwater Eel Family, ANGUILLIDAE

American eel, Anguilla rostrata (Lesueur)

Herring Family, CLUPEIDAE

Skipjack herring, *Alosa chrysochloris* (Rafinesque) Gizzard shad, *Dorosoma cepedianum* (Lesueur) Threadfin shad, *Dorosoma petenense* (Günther)

Minnow Family, CYPRINIDAE

Blacktail shiner, *Cyprinella venusta* (Girard)
Common Carp, *Cyprinus carpio* Linnaeus
Cypress minnow, *Hybognathus hayi* Jordan
Mississippi silvery minnow, *Hybognathus nuchalis* Agassiz
Striped shiner, *Luxilus chrysocephalus* Rafinesque
Ribbon shiner, *Lythrurus fumeus* Evermann
Redfin shiner, *Lythrurus umbratilis* (Girard)

Golden shiner, *Notemigonus crysoleucas* (Mitchill)

Pallid shiner, Notropis amnis Hubbs and Greene

Emerald shiner, Notropis atherinoides Rafinesque

Bluehead shiner, Notropis hubbsi Bailey and Robison

Taillight shiner, Notropis maculatus (Hay)

Weed shiner, Notropis texanus (Girard)

Mimic shiner, Notropis volucellus (Cope)

Pugnose minnow, Notropis emiliae Hay

Bluntnose minnow, *Pimephales notatus* (Rafinesque)

Bullhead minnow, *Pimephales vigilax* (Baird and Girard)

Creek chub, Semotilus atromaculatus (Mitchill)

Sucker Family, CATOSTOMIDAE

Creek chubsucker, Erimyzon oblongus (Mitchill)

Lake chubsucker, Erimyzon sucetta (Lacépède)

Smallmouth buffalo, *Ictiobus bubalus* (Rafinesque)

Bigmouth buffalo, Ictiobus cyprinellus (Valenciennes)

Black buffalo, *Ictiobus niger* (Rafinesque)

Spotted sucker, *Minytrema melanops* (Rafinesque)

Blacktail redhorse, Moxostoma poecilurum (Jordan)

Freshwater Catfish Family, ICTALURIDAE

Black bullhead, *Ameiurus melas* (Rafinesque)

Yellow bullhead, Ameiurus natalis (Lesueur)

Blue catfish, *Ictalurus furcatus* (Lesueur)

Channel catfish, *Ictalurus punctatus* (Rafinesque)

Tadpole madtom, Noturus gyrinus (Mitchill)

Brindled madtom, Noturus miurus Jordan

Freckled madtom, Noturus nocturnus Jordan and Gilbert

Brown madtom, Noturus phaeus Taylor

Flathead catfish, *Pylodictis olivaris* (Rafinesque)

Pike Family, ESOCIDAE

Grass pickerel, Esox americanus vermiculatus Lesueur

Chain pickerel, Esox niger Lesueur

Pirate Perch Family, APHREDODERIDAE

Pirate perch, Aphredoderus sayanus (Gilliams)

Killifish Family, CYPRINODONTIDAE

Golden topminnow, Fundulus chrysotus (Günther)

Starhead topminnow, Fundulus nottii (Agassiz)

Blackstripe topminnow, Fundulus notatus (Rafinesque)

Blackspotted topminnow, Fundulus olivaceus (Storer)

Livebearer Family, POECILIIDAE

Western mosquitofish, Gambusia affinis (Baird and Girard)

Silverside Family, ATHERINIDAE

Brook silverside, Labidesthes sicculus (Cope)

Temperate Bass Family, PERCICHTHYIDAE

White bass, *Morone chrysops* (Rafinesque)

Yellow bass, *Morone mississippiensis* Jordan and Eigenmann

Striped bass, *Morone saxatilis* (Walbaum)

Palmetto bass, Morone saxatilis & Morone chrysops (cross)

Sunfish Family, CENTRARCHIDAE

Flier, Centrarchus macropterus (Lacépède)

Banded pygmy sunfish, Elassoma zonatum Jordan

Green sunfish, Lepomis cyanellus Rafinesque

Warmouth, *Lepomis gulosus* (Cuvier)

Orangespotted sunfish, *Lepomis humilis* (Girard)

Bluegill, *Lepomis macrochirus* (Rafinesque)

Dollar sunfish, *Lepomis marginatus* (Holbrook)

Longear sunfish, *Lepomis megalotis* (Rafinesque)

Redear sunfish, *Lepomis microlophus* (Günther)

Spotted sunfish, *Lepomis punctatus* (Valenciennes)

Bantam sunfish, Lepomis symmetricus Forbes

Spotted bass, *Micropterus punctulatus* (Rafinesque)

Northern largemouth bass, *Micropterus salmoides (*Lacépède)

White crappie, *Pomoxis annularis* Rafinesque

Black crappie, Pomoxis nigromaculatus (Lesueur)

Perch Family, PERCIDAE

Scaly sand darter, *Ammocrypta vivax* Hay

Mud darter, Etheostoma asprigene (Forbes)

Bluntnose darter, Etheostoma chlorosomum (Hay)

Creole darter, Etheostoma collettei Birdsong and Knapp

Swamp darter, *Etheostoma fusiforme* (Girard)

Slough darter, Etheostoma gracile (Girard)

Harlequin darter, Etheostoma histrio Jordan and Gilbert

Goldstripe darter, Etheostoma parvipinne Gilbert and Swain

Cypress darter, Etheostoma proeliare (Hay)

Redfin darter, Etheostoma whipplei (Girard)

Logperch, Percina caprodes (Rafinesque)

Blackside darter, *Percina maculata* (Girard)

Blackbanded darter, *Percina nigrofasciata* (Agassiz)

Dusky darter, *Percina sciera* (Swain)

Drum Family, SCIAENIDAE

Freshwater drum, Aplodinotus grunniens Rafinesque

Threatened/endangered/exotic species

Bald Eagle

CREEL

Historic Information/Type

Recreational angler surveys were conducted for 12-month periods during 1964-70, 1981, 1983, and 2011. The most recent creel survey in 2011 was an access survey with boat counts conducted by lake zones. This survey was a requirement for the 3 year mortality study initiated in 2010. Results are not yet available.

WATER USE

Hunting

Related Bayou D'Arbonne Lake Watershed District regulations listed in APPENDIX V.

Skiing

Approximately 1,000 acres were cleared of timber immediately upstream of the dam prior to impoundment. In addition, 1,000 acres were cleared of timber in the vicinity of Hwy 33. Both area are designated and marked with buoys for skiing.

Swimming

A designated swimming area is provided by the Bayou D'Arbonne Lake Watershed District at the North spillway ramp. The area includes restroom facilities, and

<u>Fishing</u>

Excellent fishing opportunities for both shoreline and boating anglers

Irrigation

Residential

APPENDIX I

(return to border waters)

RELATED NATURAL AND SCENIC RIVERS INFORMATION

The following rivers or designated segments thereof are hereby designated as being natural and scenic rivers:

Bayou D'Arbonne - Union, Ouachita - From the Lake D'Arbonne dam to its entrance into the Ouachita River.

Corney Bayou - Claiborne, Union - From the Louisiana-Arkansas state line to Corney Lake and

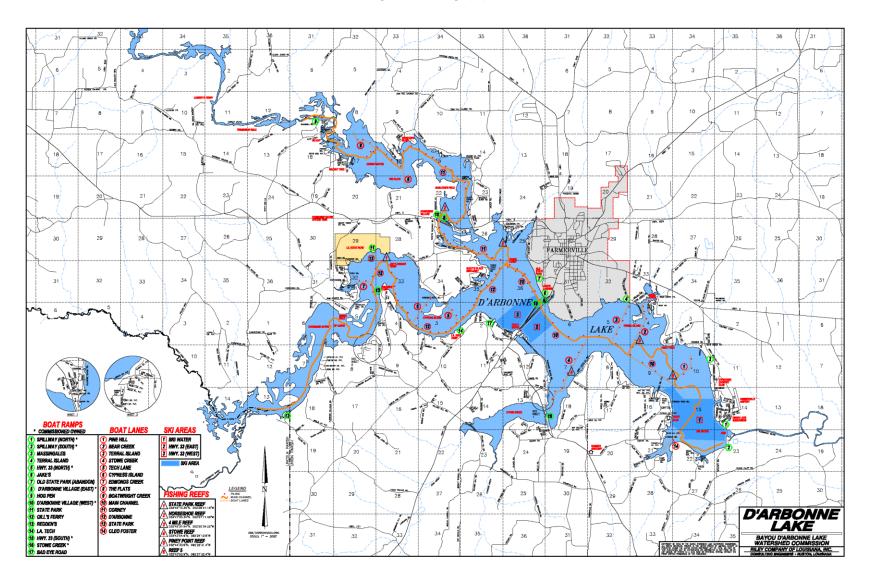
Corney Lake Dam to Lake D'Arbonne.

Middle Fork of Bayou D'Arbonne - Claiborne, Union From its origin near La. Hwy. 2 alternate to Lake D'Arbonne. Notwithstanding any other law to the contrary, however, that portion of the bayou located in Sections 19, 20, 21, and 28 of Township 23 North, Range 7 West in Claiborne Parish shall not be a natural and scenic river; provided however, if a reservoir and dam in said portion of the bayou are not approved, funded, and under construction by September 1, 1995, said portion of the bayou shall be a natural and scenic river.

APPENDIX II

(return to maps)

MAP OF D'ARBONNE LAKE



APPENDIX III

(return to crappie Regs)

NOTICE OF INTENT

Department of Wildlife and Fisheries Wildlife and Fisheries Commission

The Wildlife and Fisheries Commission hereby establishes the following Rule on Crappie (Pomoxis spp.) on Bayou D'Arbonne Lake, located in Union and Lincoln Parishes, Louisiana.

Title 76

WILDLIFE AND FISHERIES

Part VII. Fish and Other Aquatic Life Chapter 1. Freshwater Sports and Commercial Fishing §197. Crappie Regulations – Daily Take

A. - A.1.a...

B. <u>Bayou</u> D'Arbonne <u>Lake</u> (Union <u>and Lincoln Parishes</u>) <u>including all areas between the Bayou</u> <u>D'Arbonne spillway structure and Gill's Ferry Landing on D'Arbonne Creek and Hogpen Landing on Corney Creek.</u>

1. Daily Limit – 25 fish per person

a. on water possession – same as daily limit per person.

AUTHORITY NOTE: Promulgated in accordance with R.S.

56:325.1(c).

HISTORICAL NOTE: Promulgated in accordance with Department of Wildlife and Fisheries, Wildlife and Fisheries Commission, LR 30:2339 (October 2004), amended LR 38:2941(November 2012), amended LR 39:

The secretary of the Department of Wildlife and Fisheries is authorized to take any and all necessary steps on behalf of the Commission to promulgate and effectuate this Notice of Intent and the final Rule, including but not limited to, the filing of the Fiscal and Economic Impact Statements, the filing of the Notice of Intent and final Rule and the preparation of reports and correspondence to other agencies of government.

Interested persons may submit written comments of the Notice of Intent to Mr. Mike Wood, Director, Inland Fisheries Section, Department of Wildlife and Fisheries, Box 98000, Baton Rouge, LA 70898-9000 no later than 4:30 p.m., June 2013.

In accordance with Act #1183 of the 1999 regular session of the Louisiana Legislature, the Department of Wildlife and Fisheries/Wildlife and Fisheries Commission hereby issues its Family Impact Statement in connection with the preceding Notice of Intent: This Notice of Intent will have no impact on the six criteria set out at R.S. 49:972(B).

Mr. Ronald Graham Chairman

APPENDIX IV

(<u>return to water quality</u>)

EPA ASSESSMENT DATA FOR D'ARBONNE WATERSHED - 2002

Table Legend:		Status is Water Status is Threatened Water Status			ater Status is Wat Impaired		er Status has not been Assessed		
Water Name		Assessment Unit ID		<u>Location</u>		Water Type	Water Size	<u>Unit</u>	Water Status
Bayou D'Arbonne - From Bayou D'Arbonne Lake to Ouachita Riv.		LA080605_00		Bayou D'Arbonne- From Bayou D'Arbonne Lake to Ouachita River (Scenic)		RIVER	31	MILES	IMPAIRED
Bayou D'Arbonne - <u>Headwaters to Lake</u> <u>Claiborne</u>		LA08060	01_00	Bayou D'Arbonne- Headwaters to Lake Claiborne		RIVER	20	MILES	IMPAIRED
Bayou D'Arbonne - Lake Claiborne to Bayou D'Arbonne Lake		LA08060	03_00	Bayou D'Arbonne- From Lake Claiborne to Bayou D'Arbonne Lake		RIVER	35	MILES	GOOD
Bayou D'Arbonne Lake		LA08060	04_00	Bayou D'Arbonne Lake		LAKE	15251	ACRES	GOOD
Corney Bayou - From Arkansas State Line to Corney Lake		LA08060	07_00	Corney Bayou-From Arkansas State Line to Corney Lake (Scenic)		RIVER	28	MILES	GOOD
Corney Bayou - From Corney Lake to Bayou D'Arbonne Lake		LA08060	09_00	Corney Bayou-From Corney Lake to Bayou D'Arbonne Lake (Scenic)		RIVER	21	MILES	IMPAIRED
Corney La	Corney Lake		08_00	Corney Lake		LAKE	1920	ACRES	GOOD
Cypress Creek - Headwaters to Bayou D'Arbonne		LA08060	06_00	Cypress Creek- Headwaters to Bayou D'Arbonne (includes Colvin Creek)		RIVER	17	MILES	IMPAIRED
Lake Claib	laiborne LA080602		02_00	Lake Claiborne		LAKE	6400	ACRES	GOOD
Middle Fork of Bayou D'Arbonne - Origin-Bayou D'Arbonne Lake		LA08061	0_00	Middle Fork of Bayou D'Arbonne-From origin to Bayou D'Arbonne Lake (Scenic)		RIVER	43	MILES	IMPAIRED

APPENDIX V

(return to hunting)

BAYOU D'ARBONNE WATERSHED DISTRICT REGULATIONS

Pursuant to its goal to maintain Lake D'Arbonne as a premier lake and to facilitate its use and enjoyment by all citizens, the Lake Commission has adopted various Ordinances regulating use of the Lake. These regulations are summarized below.

Boat Launching

No person is allowed to use any Boat Launching Facility, whether publicly or privately owned, for any purpose other than the launching of a boat.

All water craft shall be placed into the water and removed from the water at the ramp. No fishing is permitted within 50 feet from the ramp at any Boat Launching Facility.

No overnight camping is permitted anywhere on any Boat Launching Facility.

No fires of any kind are allowed on any Boat Launching Facility.

No person is allowed on any Boat Launching Facility from sunset to sunrise except individuals loading and unloading boats and gaining access to vehicles lawfully parked on the Boat

Launching Facility parking area

No littering, dumping or depositing refuse is allowed in or around any Boat Launching Facility except in proper garbage and trash containers.

No horses are allowed on any Boat Launching Facility.

Only licensed motor vehicles are allowed on any Boat Launching Facility. Vehicles should not be driven at a greater rate of speed than shown on posted speed limit signs at the Boat Launching Facility. Parking of vehicles is restricted to hard road surfaces and designated parking areas.

No alcoholic beverages are to be consumed on any Boat Launch Facility. Loud, unnecessary noises or music or improper conduct are not permitted, also.

No firearms shall be discharged on any Boat Launching Facility.

No swimming is allowed from any Boat Launching Facility.

Willful injury or destruction, or attempt to injure or destroy, any kind of public structure is prohibited at any Boat Launching Facility.

A violation is considered a misdemeanor and carries a fine not to exceed \$500 or imprisonment in the parish jail for no more than 30 days, or both.

Watercraft Speeds

All watercraft must reduce to idle speed within fifty (50') feet of all state highway bridges over the Lake.

A violation is considered a misdemeanor and carries a fine not to exceed \$500.

Duck Blinds / Firearms

No duck blind or other structure is allowed to be constructed less than 1,000 feet from any dwelling located on or near the shoreline of the Lake.

No person is allowed to engage in hunting activities or discharge any firearm less than 1,000 feet from any dwelling located on or near the shoreline of the Lake.

A violation is considered a misdemeanor and carries a fine not to exceed \$500 or imprisonment in the parish jail for no more than 30 days, or both.

Metallic Objects

The placing of metallic objects in the Lake is strongly discouraged, other than a metallic object for a user's temporary use, such as a boat, motor or recreational equipment.

The use of any types of metallic rods, stakes, pipes, poles, tubing, rebar, or similar objects in the Lake is prohibited except in the following situations:

- a) In connection with signs, markers, or other objects placed with the permission of the State of Louisiana;
- b) In connection with docks, piers, boathouses or other structures permanently attached to the shore/bank of the Lake;
- c) In connection with floating docks or other structures clearly marked to be visible to persons using the Lake;
 - d) In connection with duck blinds constructed on or prior to September 1, 2003, if the duck blind is actually used for waterfowl hunting each season and is clearly marked;
 - e) In connection with floating duck blinds constructed after September 1, 2003, (no metal objects should be driven into the Lake bed), if the duck blind is actually used for waterfowl hunting each season and is clearly marked;
- f) In connection with the mounting of a light, birdhouse, slide, swing, or similar object in close proximity to a dwelling located on the shore or bank of the Lake.

The placing of any cable, wire, rope or other similar apparatus above the surface of the Lake that is used to support, hang, or attach markers, signs, yo-yos, mechanical trigger devices, trotlines, hooks, or any other device is prohibited.

A violation is considered a misdemeanor and carries a fine not to exceed \$500.

Piers / Boathouses

Each pier, dock, boathouse, barge or other structures extending into the Lake should not extend more than 100 feet or 25% of cove width, whichever is less, perpendicular from the 80.0 foot mean sea level contour line of the Lake, unless written approval is obtained from the Lake Commissioners Board.

This applies to all such existing piers and structures which are materially enlarged or altered after July 1, 2004, and applies to all new structures constructed after July 1, 2004.

Commercial piers or structures are exempt from this ordinance, although such commercial piers or structures may otherwise be regulated by the Board.

The following guidelines are recommended on the Lake:

- a) Each pier or dock extending into the Lake may contain a porch, deck, or similar structure, provided that the same shall not be used for living quarters, and may contain a boat house or boat slips.
- b) Posts and material touching water should be treated wood. Flooring and handrails should be treated wood (minimum 2" x 6").
 - c) All pier wiring should be placed in conduit.
 - d) All floating piers, docks, boathouses, barges and/or other structures must be securely attached or moored in an approved manner at all times and anchored properly in order to prevent them from becoming unmoored and floating away during periods of high water.

Highway Rights of Way

Parking on highway rights of way is prohibited by the Louisiana Department of Transportation and Development.

Flood Mitigation

The normal pool stage for Lake D'Arbonne is 80 feet. Lake water levels of 84 feet and higher is considered to be flood level stage and the Lake is closed to all boat traffic. The Bayou D'Arbonne

Lake Watershed District_has adopted procedures to request opening the spillway gates at 85 feet and having them remain open until the water level drops back to 83 feet.

Drawdown Schedule

The Bayou D'Arbonne Lake Watershed District has adopted a policy of a fall drawdown every four years beginning in 2004 involving opening the spillway gates the day after Labor Day and closing them on November 15th. This will enable homeowners to complete necessary repairs and allow for ramp maintenance, channel maintenance, and stump clearing.

APPENDIX VI

RELATED PUBLICATIONS

- Davis, James T. and Janice S. Hughes. 1964. Results of Creel Census on Four North Louisiana Lakes. Proc. Ann. Conf. Southeast. Assoc. Fish and Wild. Agencies 18:495-506.
- Hughes, Janice S. and Neil H. Douglas. 1965. Movement of Native and Stocked Fish in D'Arbonne Lake after Impoundment. Proc. Ann. Conf. Southeast. Assoc. Fish and Wildl. Agencies 19:349-363.
- Davis, James T. and Janice S. Hughes. 1965. Effects of Impoundment on the Benthic Population of Bayou D'Arbonne, Louisiana. Proc. Ann. Conf. Southeast. Assoc. Fish and Wild.

 Agencies 19:364-374.
- Grafton, Tommy D. 1965. A History of the Lake D'Arbonne Project. Unpublished. 57 pp.
 - Walker, Bobby T. 1965. A Taxonomic Survey of the Fish Fauna of Bayou D'Arbonne Drainage System Prior to Impoundment. Proc. LA Acad. Sciences Vol. XXVIII, December, pp. 105-110.
- Wood, Michael G. 1981. A Taxonomic Survey of the Fishes of Bayou D'Arbonne after Impoundment. MS Thesis. NLU. 115 pp.
- FTN Associates Ltd., 2001, Tributaries to Bayou D'Arbonne Lake TMDL for Biochemical Oxygen-Demanding Substances, 30pp.